Application No. 10/034995

PROPOSED AMENDED CLAIM 1:

1.   (Currently Amended) An agent-based distributed reasoning system for managing a computer network with a plurality of hosts, the system comprising:

a plurality of interface agents running on the plurality of hosts, the plurality of interface agents assigned to operating resources within the computer network;

a plurality of distributed case-based reasoning agents running on the plurality of hosts, wherein the plurality of distributed case-based reasoning agents is capable of accessing one or more case bases; and

a plurality of response agents running on the plurality of hosts, and

a plurality of self-monitoring of agents providing, where necessary, self healing of agents functions,

wherein an interface agent in the plurality interface agents monitors event producing components in the system being managed, captures events, is configured to filter events, and sends an input regarding an event in an assigned resource to an appropriate distributed case-based reasoning agent among the plurality of distributed case-based reasoning agents,

wherein agents carrying out actions in their local environments to include messaging to other agents, site directory service, scheduling actions, and implementing response functions within the monitored network,

wherein should an agent fail, the related functions are reassigned to another agent, until the failed agent is repaired or restarted,

wherein the appropriate distributed case-based reasoning agent, upon receiving the input, accesses the one or more case bases to select a response and communicates the response to an appropriate response agent in the plurality of response agents, and

wherein the appropriate response agent implements the response to resolve the event.